Aims:
The aims of this assignment are to:
- demonstrate your ability to develop a logical database design;
- demonstrate your understanding of interface design principles, and apply these skills to a specific business context;
- develop your team and project management skills.

Value:
This assignment is worth 20% of the total assessment for the subject, made up of individual and team components.
- Design specification document – 10 %
- Interface design walkthrough – 10 %

Assignment Outline:
Your Functional Specification has been approved and your team must now complete a design specification.

This assignment requires you to:
- understand and document the conference system design requirements by preparing a design specification;
- walkthrough your interface design with the client by means of a demonstration.

Due Date:
Design Specification Report - Week 7: beginning 18th April, 2005
Interface design walkthrough – Week 7: beginning 18th April, 2005 during your studio session.

Assignment, Team and Project Management:
This assignment has both individual and team components. The team components of this assignment will be carried out by your team. The individual components will help you develop your system develop skills, while the team components will focus on developing your integration, teamwork and project management skills.

For assistance in managing your team and project please refer to Sections 5, 6.3.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, and 9.9 of your IMS2501 Student Guide.
Each team must maintain the project management documentation specified in Section 6.3.2 of the Student Guide. All project documentation must be handed in with the Functional Specification.

Inadequate team participation will result in a fail for all team components of the assignment.

Peer Review / Project Team Contributions:
Each student in the team must fill out a Peer Review / Project Contribution form (see Section 9.10 of the Student guide for the template). This will be done individually and will be collected by the studio staff during the studio session of Week 7.
Assessment Notes:
Please refer to Section 11 - Appendix C in the Student Guide for details about Standards for presentation, Assignment cover sheets, Extensions and Submission and Return of assignments.

Task 1 – Understand and document the system’s design requirements
Your task is to accurately document the design requirements for the new automated conference system.
You will use your functional specification as a basis for your design. You may contact the conference organisers (studio staff) to clarify any issues and obtain further information.

Task Deliverable:
Design Specification
(one document which includes all the team and individual components)
Note: Each individual component must be labelled with the student’s name and ID

Design Specification – report sections:
Domain model
Revise your Domain model to include any pseudo code for the class’s operations/behaviours.

Ideal Relational Data Model (DBMS Independent)
Object structures mapped from domain model to tables
Candidate keys identified (these are possible primary, foreign and composite keys)
Null fields identified
Domains identified

Include a normalised data structure diagram

User Interface Design
For each function in your system specification, create interfaces which meet the business requirements. The interfaces you create should be based on Windows forms using the controls available in Visual Studio .Net. Each form you design is a “class” in a strict object-oriented sense, however, you don’t need to add these classes to your domain model. You must consider all validation and error handling. Remember, however, that these validation and error handling functions are best implemented in the “business” tier of your application. That means while you will identify the validation and error handling requirements as part of your interface design you will need to add methods to your design objects to implement them. For the purposes of the report this section should include printed screen shots of each function which will be discussed during the Task 2 - Interface Design Walkthrough.

While each team member creates the interfaces for their function, the total system must be presented to the client as an integrated whole.
Task 2 – Interface Design Walkthrough

Your task is to walkthrough your interface design with the client, clearly showing how each function meets the client’s business requirements. Each team member must walkthrough their own function. The duration of the walkthrough will be approximately 15 minutes. The interface design prototypes must be developed using VB.NET. They do not have to be working prototypes.

Task Deliverable:
Walkthrough/Demonstration of Interface Design

*Interface Design*

System Functionality
- Only authorised access allowed
- Standard functionality (editing, help, etc…)

Business Functionality
- All business requirements met

Appearance – Consideration of interface design principles
- Does it look good?
- Does it follow a window’s based GUI standards?
- Appropriate use of space … not too cluttered
- Appropriate fields teamed together
- Good use of colour
- Function buttons located and labelled appropriately
- Message boxes located appropriately
- Have standards been followed?

Usability
- Usability .. is it easy to use?
- Does the dialogue flow easily through different aspects of the function?
- The use of Help, Exit, Clear Screen, Save, etc. should be consistent and obvious?
- Is repeat functionality (system or business) handled consistently?
  (eg. Is ‘duplicate handling’ done in a standard way?)